

Polymer electrolyte fuel cell, method of manufacturing the same and inspection method therefor

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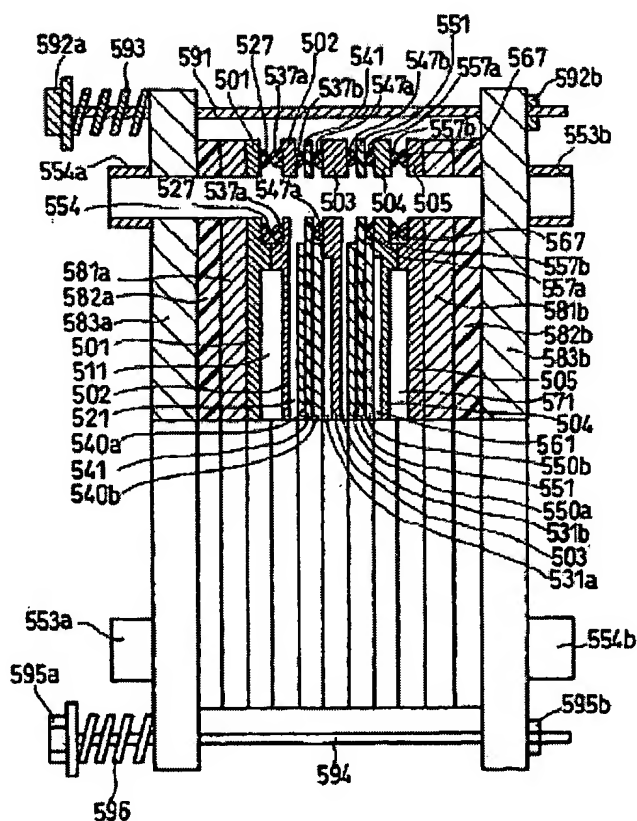
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Abstract of EP1349228

The durability of a polymer electrolyte fuel cell is very significantly improved by using a tightening pressure of about 2 to 4 kgf/cm² of area of electrode; or a tightening pressure of about 4 to 8 kgf/cm² of contact area between electrode and separator plate; or by selecting a value not exceeding about 1.5 mS/cm² for the short-circuit conductivity attributed to the DC resistance component in each unit cell; or by selecting a value not exceeding about 3 mA/cm² for the hydrogen leak current per area of electrode of each MEA. Further, in a method of manufacturing or an inspection method for a polymer electrolyte fuel cell stack, fuel cells having high durability can be efficiently manufactured by removing such MEAs or unit cells using such MEAs or such cell stacks having short-circuit conductivity values and/or hydrogen leak current values exceeding predetermined values, respectively.

FIG. 5



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